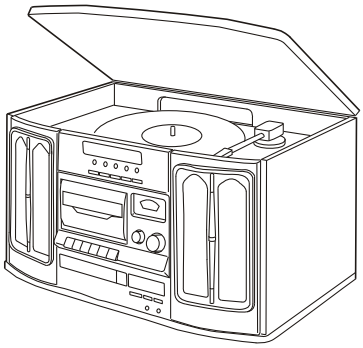

TEAC

SERVICE MANUAL

GF-330

Compact Hi-Fi Stereo System

For U.S.A and general export version

NOTES

- PC boards shown are viewed from parts side.
- The parts with no reference number or no parts number in the exploded views are not supplied.
- As regards the resistors and capacitors, refer to the circuit diagrams contained in this manual.
- ⚠ Parts marked with this sign are safety critical components. They must be replaced with identical components - refer to the appropriate parts list and ensure exact replacement.

CONTENTS

1 SAFETY INFORMATION 2
2 SPECIFICATIONS 3
3 ADJUSTMENT AND CHECKS 4
3-1 TUNER SECTION 4
3-2 TURNTABLE SECTION 6
3-3 CASSETTE DECK SECTION 6
4 EXPLODED VIEWS AND PARTS LIST 7
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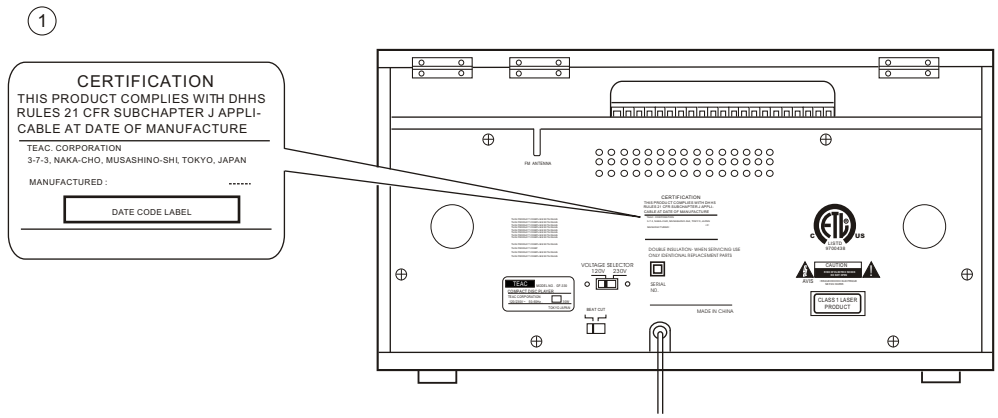
1 SAFETY INFORMATION

SAFETY INFORMATION

This product has been designed and manufactured according to FDA regulations " title 21, CFR, chapter 1,subchapter J,based on the Radiation Control for Health and Safety Act of 1968" and is classified as class 1 laser product. There is no hazardous invisible laser radiation during operation because invisible laser radiation emitted inside of this product is completely confined in the protective housings. The label required in this regulation is shown ①.

• CAUTION

USE OF CONTROLS OR ADJUSTMENT OR PERFORMANCE OF PROCEDURES OTHER THAN THOSE SPECIFIED HEREIN MAY RESULT IN HAZARDOUS RADIATION EXPOSURE.



Optical pickup:	
Type	:SOH-AA-8E15
Manufacturer	:SONY CORPORATION
Laser output	: Less than 0.35mW on the objective lens
Wavelength	: 79 0 +/-25nm

2 SPECIFICATIONS

AMPLIFIER Section

Output Power: 2.5W+2.5W (U.S.A/Canada)
Frequency Response: 60 to 30,000 Hz

TUNER Section

FM Section

Frequency Range: 88.0 to 108.00 Mhz
Sensitivity (S/N 30 dB): 18 dB u V

AM Section

Frequency Range: 530 to 1710 Khz (U.S.A/Canada)
Sensitivity (S/N 20 dB): 55 dB uV/m
Signal-to-Noise Ratio: 30dB

CD PLAYER Section

Frequency Response: 40 to 16,000 Hz +/-4dB
Signal-to-Noise Ratio: 75dB (IEC-A)
Wow and Flutter: Unmeasurable
Channel Separation: 35dB

CASSETTE DECK Section

Track System: 4 track, 2 channel stereo
Tape Speed: 4.8cm/sec
Wow and Flutter: 0.15% (WRMS)
Frequency Response: 125 to 6,300 Hz +/-3dB
Signal-to-Noise Ratio: 45dB

SPEAKER SYSTEM Section

Type: 1-way
Impedance: 4-ohms

GENERAL

Power Requirements: 120V ~, 60Hz (U.S.A/Canada)
120V/230V ~, 50-60Hz (General Export Version only)

Power Consumption: 30W
Dimension (W x H x D):
Main Unit: 498 x 279 x 321 mm
(19-5/8 x 11 x 12-5/8) inches

Weight: 11.36 kg

Standard Accessories: Owner's Manual x 1
Warranty Card x 1
45rpm Adaptor

- Improvements may result in specification or feature changes without notice.

3 ADJUSTMENTS AND CHECKS

3-1 TUNER SECTION

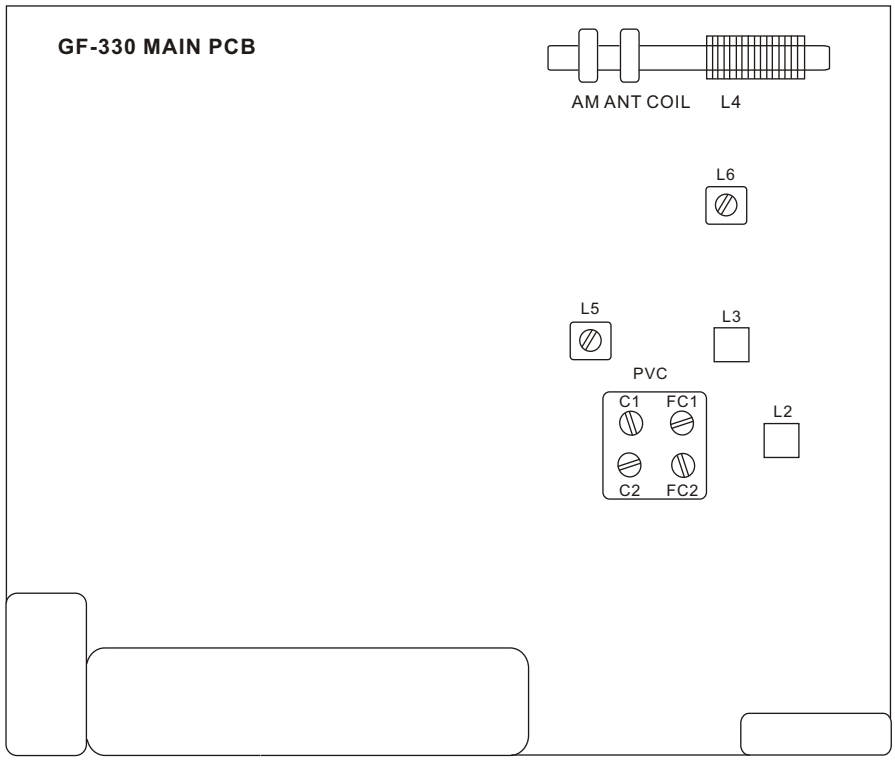
- Use a screwdriver with a plastic or ceramic grip for all adjustment.

3-1-1 FM adjustment

1. Set the function switch to the FM position.
2. Connect the signal generator output through a 75 ohm dummy antenna to "ANT" on MAIN PCB.
3. Connect the oscilloscope to the speaker terminal.
4. Set the signal generator as listed in the alignment chart.

3-1-2 AM adjustment

1. Set the function switch to the AM position.
2. Connect the test loop antenna across the output of the signal generator.
3. Connect the oscilloscope to the speaker terminal.
4. Set the signal generator as listed in the alignment chart.



3-1-3 FM/AM alignment chart

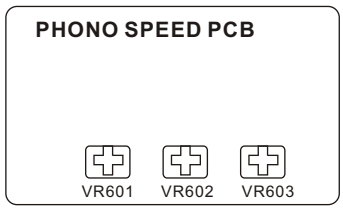
ITEM	SG SETTING	TUNER SETTING	ADJUSTMENT POINT	ADJUSTMENT
FM				
1. FM band	87.5MHz 1kHz, +/-22.5kHz dev.	87.5MHz	L3	Adjust for max.output.
	108MHz 1kHz, +/-22.5kHz dev.	108MHz	PVC FC1	
2. Tracking	90MHz 1kHz, +/-22.5kHz dev.	90MHz	L2	Adjust for max. output and best waveform.
	104MHz 1kHz, +/-22.5kHz dev.	104MHz	PVC FC2	
	Repeat step 2			
AM				
1. IF adjustment	455kHz 1kHz, 30% mod	600kHz	L6	Adjust for max.output.
2. AM band	530kHz 1kHz, 30% mod	530kHz	L5	Adjust for max. output.
	1710kHz 1kHz, 30% mod	1710kHz	PVC C1	
3. Tracking	600kHz 1kHz, 30% mod	600kHz	AM ANT L4	Adjust for max. output and best waveform.
	1400kHz 1kHz, 30% mod	1400kHz	PVC C2	
	Repeat step 3			

3-1-4 TURNTABLE alignment chart

ITEM	HP - 4005 Number :	ADJUSTMENT POINT	SPEED	ADJUSTMENT	WOW & Flutter
TURNTABLE					
33	NO.3	VR601	3000Hz	+/- 30Hz	<0.35%
45	NO.4	VR602	3000Hz	+/- 30Hz	-----
78	NO.4	VR603	5200MHz	+/- 30Hz	-----

3-2 TURNTABLE SECTION

1. Set the function switch to the PHONO position.
2. Connect the oscilloscope to the speaker terminal.
3. Use a HP-4005 record for all adjustment.



3-3 CASSETTE DECK SECTION

3-3-1 Tape speed adjustment

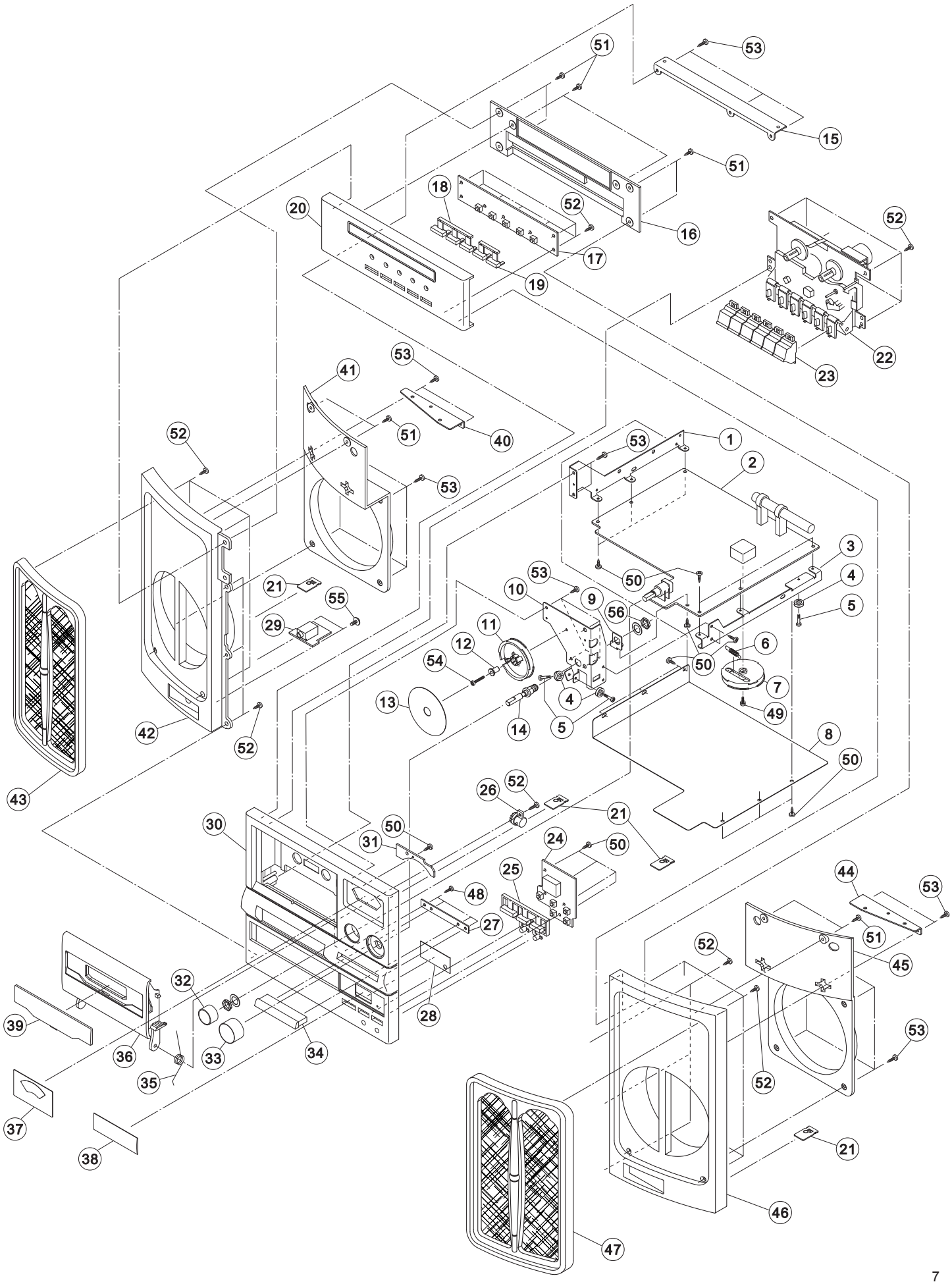
1. Set the function switch to the TAPE position.
2. Connect the frequency counter to the speaker terminal.
3. Load tape deck with MTT-111N (use the midpoint of side A).
4. Press the PLAY button on tape and adjust MOTOR VR to obtain 3,000Hz +/- 30Hz.
5. Stop tape.

3-3-2 Azimuth adjustment

1. Connect the oscilloscope to the speaker terminal.
2. Load a MTT-114N test tape and press the PLAY button.
3. Adjust the azimuth using a screwdriver to maintain the max.
   L & R out voltage.
4. Secure the azimuth position using locking paint.

4 EXPLODED VIEWS AND PARTS LIST

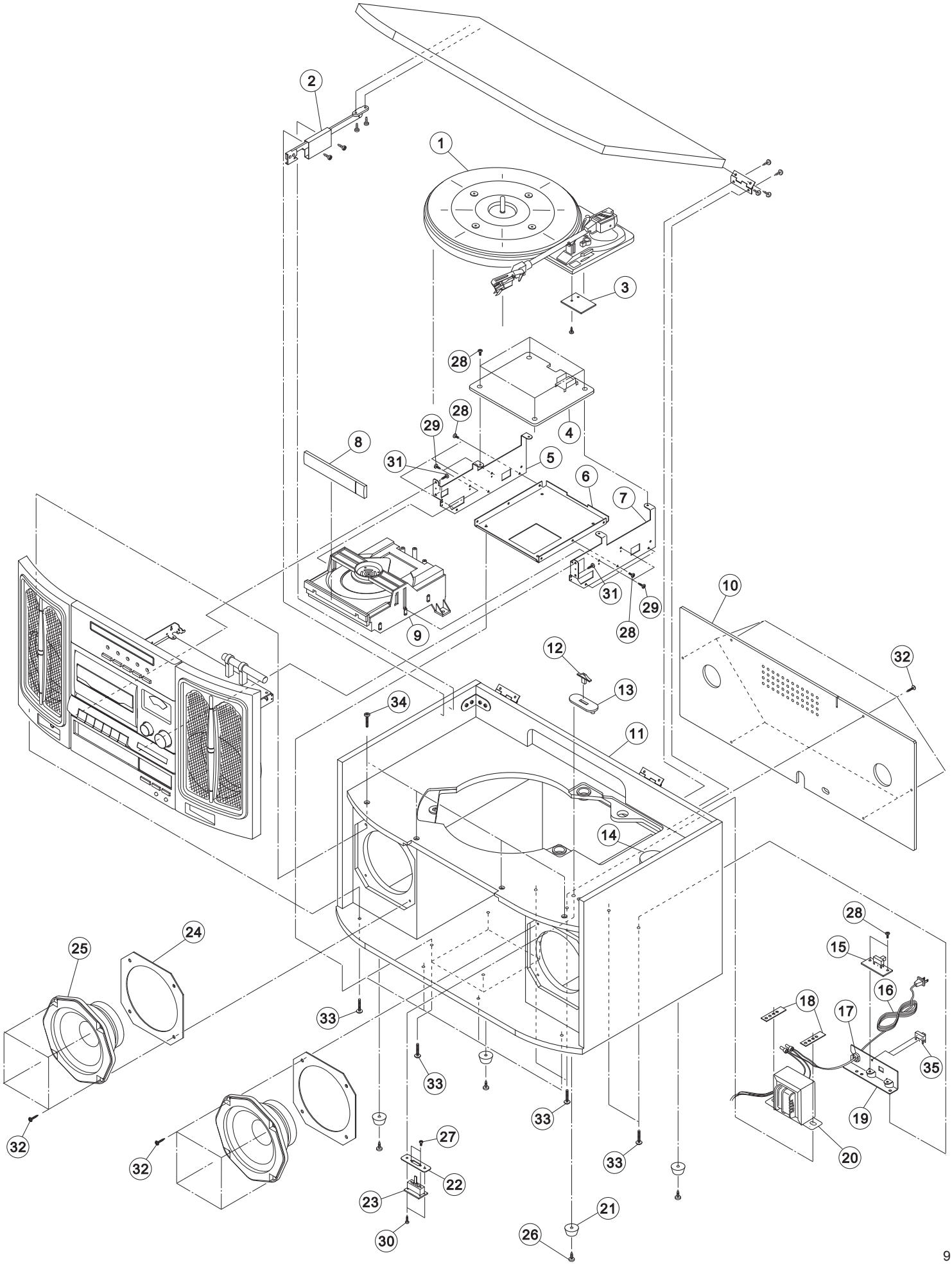
EXPLODED VIEW - 1



EXPLODED VIEW-1

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
1-1	011-F3300100	MAIN PCB BKT - L	
1-2	100-300N2000	MAIN PCB ASS'Y	
1-3	011-F3300000	MAIN PCB BKT - R	
1-4	008-0GP18001	DIAL PULLY	
1-5	025-00018002	FIXING SCREW 3X9MM ZMC HD	
1-6	031-02000010	DIAL DRUM SPRING	
1-7	010-02000200	DIAL DRUM - A	
1-8	020-F3300000	CD PCB SHIELD PLATE	
1-9	011-02000000	MAIN PCB SUB-BKT	
1-10	011-02000600	TUN. DRUM BKT	
1-11	010-02000300	DIAL DRUM - B	
1-12	017-02000000	DIAL SHAFT	
1-13	015-F3000200	DIAL SCALE	
1-14	014-GF200000	TUN. SHAFT	
1-15	011-02001300	F. PANEL BKT	
1-16	001-02000200	FUNCTION BACK PANEL	
1-17	100-300N2040	FUNCTION PCB ASS'Y	
1-18	004-F3000300	CONTROL KNOB - A	
1-19	004-F3000400	CONTROL KNOB - B	
1-20	001-300N0000	FUNCTION F. PANEL	
1-21	011-GP180300	NUT PLATE	
1-22	038-102GF600	CASSETTE MECHA	
1-23	004-F3000600	CASSETTE KEY	
1-24	100-F2002040	CD CONTROL PCB ASS'Y	
1-25	004-F3000200	CD CONTROL KNOB	
1-26	008-0GP18000	GEAR DUMPER ASSY	
1-27	011-02001400	MASKING F. PANEL SW HOLDER	
1-28	015-F3000300	CD LED WINDOW	
1-29	100-300N2030	HEAD PHONE JACK PCB ASS'Y	
1-30	001-F3000000	FRONT PANEL	
1-31	100-300N2060	POWER/ST. LED PCB ASS'Y	
1-32	004-F3000100	VOLUME KNOB	
1-33	004-F3000000	TUNING KNOB	
1-34	004-F3000500	MASKING F. PANEL SWITCH	
1-35	031-02000110	CASSETTE OPEN SPRING	
1-36	005-F3000000	CASSETTE CASE	
1-37	015-F3000100	DIAL WINDOW	
1-38	015-02000000	CD LENS PLATE	
1-39	007-F3000000	CASSETTE WINDOW	
1-40	011-02001000	SPEAKER GRILL BKT - L	
1-41	009-02000200	SPEAKER HOLDER - L	
1-42	009-F3000000	SPEAKER GRILL BASE - L	
1-43	001-F3000300	SPEAKER GRILL ASSY - L	
1-44	011-02001100	SPEAKER GRILL BKT - R	
1-45	009-02000300	SPEAKER HOLDER - R	
1-46	009-F3000100	SPEAKER GRILL BASE - R	
1-47	001-F3000400	SPEAKER GRILL ASSY - R	
1-48	021-12608032	SCREW 2.6X8MM PT ZMC HD	
1-49	022-82608032	SCREW W/SPW 2.6X8MM PM ZMC HD	
1-50	024-23008032	SCREW 3X8MM BA ZMC HD	
1-51	024-23010033	SCREW 3X10MM BA BLK ZMC HD	
1-52	024-23010032	SCREW 3X10MM BA ZMC HD	
1-53	024-23012032	SCREW 3X12MM BA ZMC HD	
1-54	026-13014022	SCREW 3X14MM PTT ZMC HD	
1-55	021-44006032	SCREW 4X6MM PWT ZMC HD	
1-56	013-90000001	HEXAGON NUT	

EXPLODED VIEW - 2



EXPLODED VIEW-2

REF. NO		PARTS NO.	DESCRIPTION	REMARKS
2-1		040-01000311	PLAYER ASS'Y (3 SPEED DC:9V)	
2-2		011-F1800500	SLIDE STAY ASSY	
2-3		100-300N2010	PHONO SPEED PCB ASS'Y	
2-4		100-98ES3090	LT-98ES CD PCB ASS'Y	
2-5		011-02001700	CD DECK BKT - L	
2-6		011-02001600	CD DECK BKT -BOTTOM	
2-7		011-02001800	CD DECK BKT - R	
2-8		006-F3000000	CD DOOR	
2-9		039-98ES0130	CD DECK & PCB ASS'Y	
2-10		016-300N0100	BACK BOARD - (UL/CSA)	
		016-300N0101	BACK BOARD - (UNI)	
2-11		016-300N0000	WOODEN CABINET ASS'Y	
2-12		004-M9700000	SPEED SW. KNOB	
2-13		010-M9700000	SPEED SW. COVER	
2-14		010-10000700	45 RPM ADAPTOR	
2-15		100-300N2050	BEAT CUT SW. PCB ASS'Y	
2-16		087-00000007	AC CORD UL	
2-17		030-00000002	AC CORD BUSH	
2-18		011-02000800	POWER TRANS. PLATE	
2-19		011-00140500	AC CORD HOLDER	
2-20	⚠	084-F3000200	POWER TRANSFORMER 120V 60HZ - (UL/CSA)	
	⚠	084-F3000201	POWER TRANSFORMER 120V/230V 50HZ - (UNI)	
2-21		037-KRA20100	RUBBER FOOT	
2-22		011-F1001040	SPEED SW. BKT	
2-23		100-300N2020	PHONO SPEED SW PCB ASS'Y	
2-24		035-F300N002	SPEAKER EVA WASHER	
2-25		061-F3000400	SPEAKER 4 OHM	
2-26		024-24012033	SCREW 4X12MM BA BLK HD	
2-27		022-12604032	SCREW 2.6X4MM PM ZMC HD	
2-28		026-23006022	SCREW 3X6MM BTT ZMC HD	
2-29		021-23008032	SCREW 3X8MM BT ZMC HD	
2-30		021-13010032	SCREW 3X10MM PT ZMC HD	
2-31		024-23010032	SCREW 3X10MM BA ZMC HD	
2-32		024-43112032	SCREW 3.1X12MM PWA ZMC HD	
2-33		026-44018022	SCREW 4X18MM PWTT ZMC HD	
2-34		024-24018033	SCREW 4X18MM BA BLK HD	
2-35	⚠	063-GF200110	AC POWER SLIDE SWITCH (UNI)	

5 PC BOARDS AND PARTS LIST

MAIN PCB ASS'Y

REF. NO		PARTS NO.	DESCRIPTION
		100-300N2000	MAIN PCB ASS'Y
		062-F300N000	MAIN PCB
		018-05030000	HEAT SINK(FOR KA7809)
		018-GF200000	HEAT SINK(FOR POWER IC)
		011-86990000	FUSE HOLDER
		056-10080001	FERRITE BAR 10X80MM
		053-F300N000	TUNER PVC
C52,53	⚠	072-30100161	CE, 16V 1000UF
C88	⚠	072-30100251	CE, 25V 1000UF
C55	⚠	072-30330251	CE, 25V 3300UF
CF1		081-04550000	AM CERAMIC FILTER SFU455KB
CF2,4		081-30107001	FM CERAMIC FILTER L10.7MA5-A
CF3		093-11070001	CERAMIC FILTERJT10.7MG18-A
CN3,4		082-10340100	3P CONNECTOR BASEP=2.5MM
CN7		082-10500100	5P CONNECTOR BASEP=2MM
CN8		082-10700100	7P CONNECTOR BASEP=2MM
CN9		082-10540100	5P CONNECTOR BASEP=2.5MM
CN11		082-10440100	4P CONNECTOR BASEP=2.5MM
D1-17,26-29		077-00414801	DIODE IN4148
D18-25	⚠	077-10400201	DIODE IN4002
FUSE01	⚠	090-11220022	FUSE T2A UL
FUSE02	⚠	090-11210022	FUSE T1A UL
IC1		075-00211101	TA2111N
IC2		075-00023300	PT233T
IC3		075-00814201	TA8142AP
IC4		075-00780901	AN7809
IC5		075-00448512	LA4485
L1		078-08500315	FM RF COIL0.8MMX5.0X3.5T
L2,3		078-08500215	FM OSC COIL0.8MMX5.0X2.5T
L4		096-GF180010	AM ANT COIL102:10T
L5		079-GF100210	AM OSC COIL(RED)
L6		079-GF100010	AM IFT COIL(BLACK)
L7		095-00100001	INDUCTOR 10UH 0.5W
L8		078-05301952	FILTER COIL0.5MMX3X19.5T
L9		079-SW100630	TAPE OSCCOIL (BLUE)
Q1,2,4-7,9,10, Q12-16,18,19, Q21,25-33		076-00C94500	TR-2SC945
Q3,23,24		076-00A73300	TR-2SA733
Q8		076-0C200100	TR-2SC2001L
Q11,20		076-00B54400	TR-2SB544F
Q17		076-00D40000	TR-2SD400
Q22		076-00D88200	TR-2SD882
VR1		069-F1002000	ROTARY VR.50KB x2 W/SW
ZD1		077-3004A20H	ZENER DIODE 3V6-HZ4A2
ZD2		077-3005C20H	ZENER DIODE 5V2-HZ5C2
ZD3		077-3011C10H	ZENER DIODE 11V -HZ11C1

HEADPHONES JACK PCB ASS'Y

REF. NO	PARTS NO.	DESCRIPTION
	100-300N2030	HEAD PHONE JACK PCB ASS'Y
		HEAD PHONE JACK PCB
CN1	082-10300100	3P CONNECTOR BASEP=2MM
CN2	082-10340100	3P CONNECTOR BASEP=2.5MM
JK301	064-35020103	HEADPHONE JACK

PHONO SPEED SW PCB ASS'Y

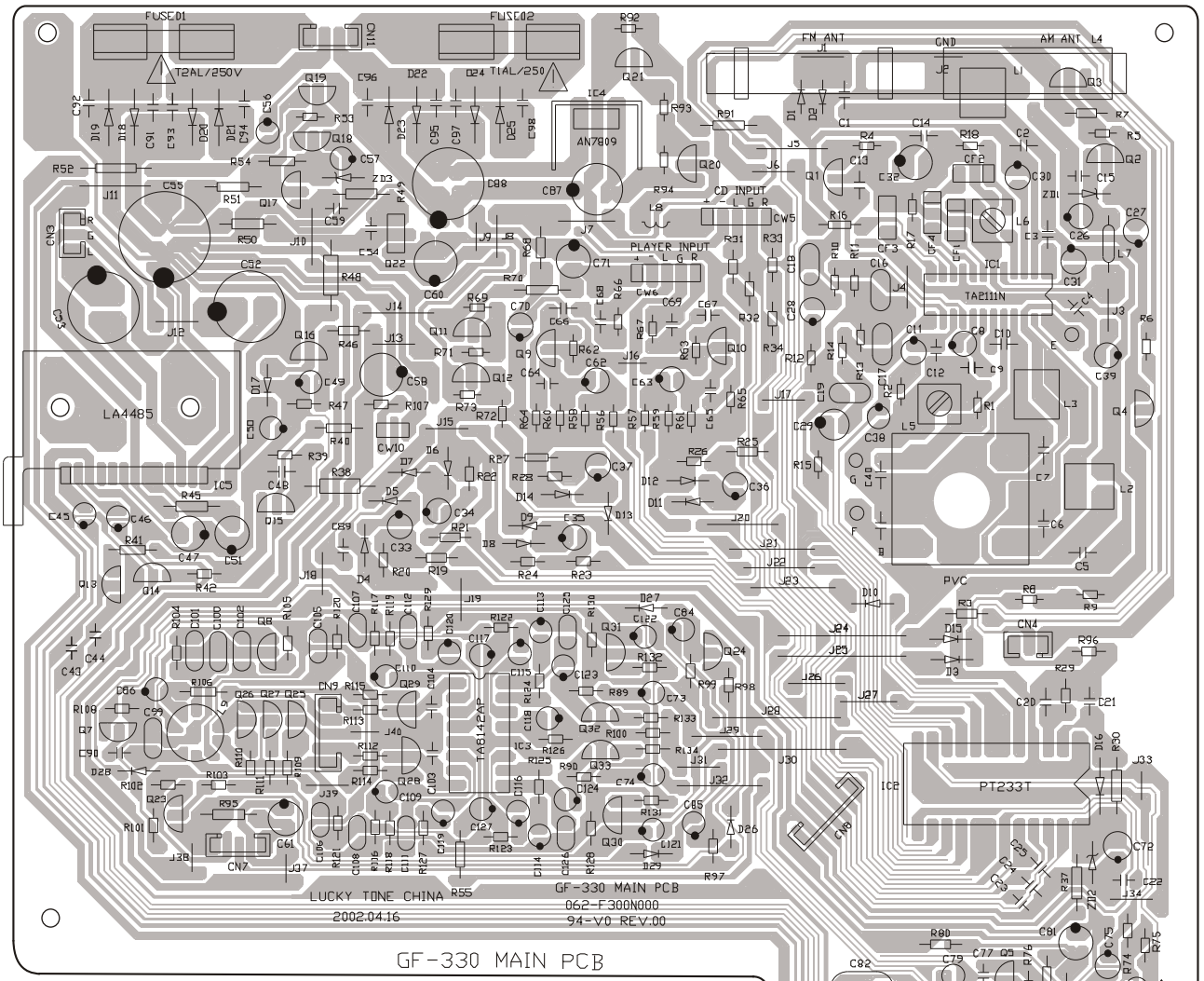
REF. NO	PARTS NO.	DESCRIPTION
	100-300N2020	PHONO SPEED SWPCB ASS'Y
		PHONO SPEED SWPCB
SW601	063-GF100110	PHONO SPEED SW2P3T

PHONO SPEED PCB ASS'Y

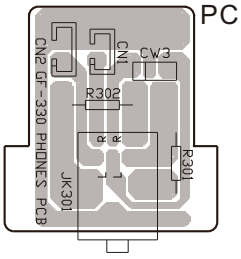
REF. NO	PARTS NO.	DESCRIPTION
	100-300N2010	PHONO SPEED PCBASS'Y
		PHONO SPEED PCB
CN601	082-10440100	4P CONNECT BASEP=2.5MM
CN602	082-10540100	5P CONNECT BASEP=2.5MM
VR601-603	092-30100000	SFR 1KB RH0612C13J

GF-330

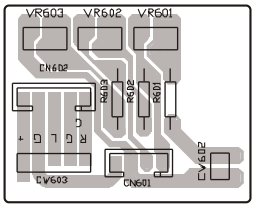
MAIN PCB



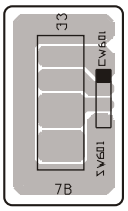
HEADPHONES JACK PCB



PHONO SPEED PCB



PHONO SPEED SW PCB



CD MAIN PCB ASS'Y

REF. NO	PARTS NO.	DESCRIPTION
	100-98ES3090	LT-98ES CD PCB ASS'Y
	062-LT98ES01	CD MAIN PCB
	018-0LT98000	HEAT SINK
CN1	082-11100100	11P CONNECTOR BASE P=2MM
CN2	082-10300100	3P CONNECTOR BASE P=2MM
CN4,5	082-10500100	5P CONNECTOR BASE P=2MM
CN6	082-10600100	6P CONNECTOR BASE P=2MM
CN7	082-21600305	16P CONNECTOR P=1MM
D1	077-30006201	DIODE ZENER GZA6.2Y
D2	077-00414801	DIODE 1N4148
IC1	075-00945731	TC9457F-010
IC2	075-00210921	TA2109F
IC3	075-00209201	TA2092N
IC4	075-00729111	TA7291S
L1,2	077-30003101	COIL CHOKE AXIAL 10UH
Q1,2,4	076-09014C00	TR-9014C
Q3,6	076-09015B00	TR-9015B
Q5	076-00901300	TR-9013G
X1	093-11693440	CRYSTAL 16.9344MHZ

CD CONTROL PCB ASS'Y

REF. NO	PARTS NO.	DESCRIPTION
	100-F2002040	CD CONTROL PCB ASS'Y
	062-GF200001	CD CONTROL PCB
LED01	094-02060201	LED (RED) LTLT-1214A
LED02	094-02080202	CD LED DISPLAY
SW001-005	063-0GP18020	TACT SWITCH

POWER/ST. LED PCB ASS'Y

REF. NO	PARTS NO.	DESCRIPTION
	100-300N2060	POWER/ST.LED PCB ASS'Y
		POWER/ST.LED PCB
LED401,402	094-02060201	LED (RED) LTLT-1214A

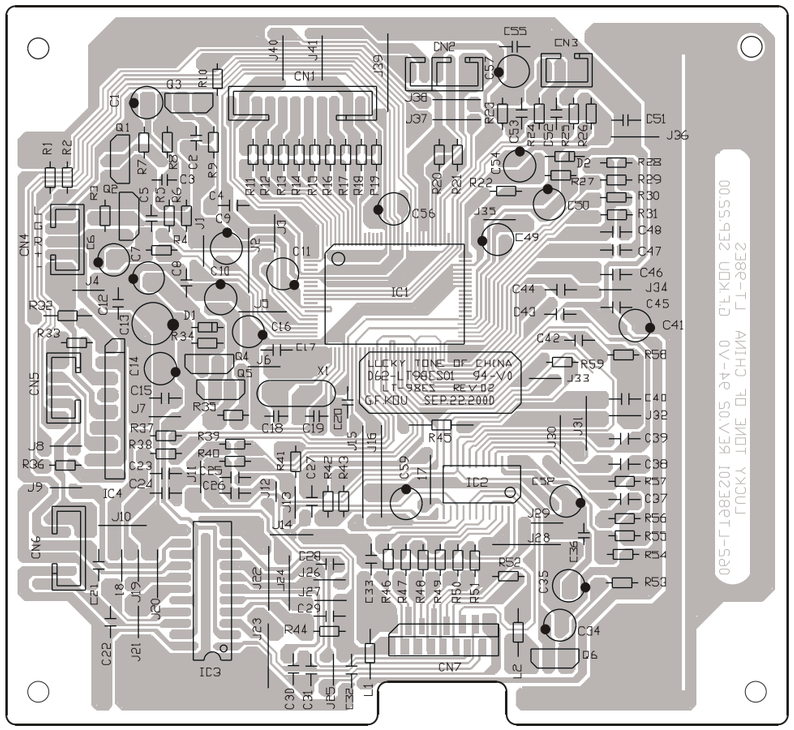
FUNCTION PCB ASS'Y

REF. NO	PARTS NO.	DESCRIPTION
	100-300N2040	FUNCTION PCB ASS'Y
		FUNCTION PCB
D801	077-00414801	DIODE 1N4148
LED801-805	094-02020201	LED (RED) L-34HD
SW801-805	063-0GP18020	TACT SWITCH SKHHAK2510

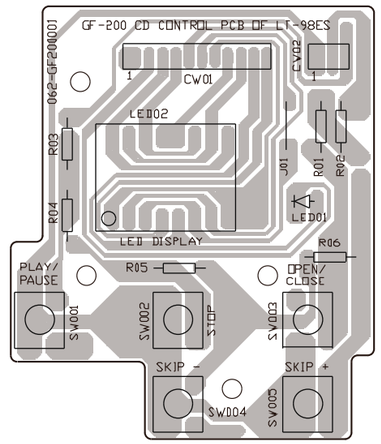
BEAT CUT SW. PCB ASS'Y

REF. NO	PARTS NO.	DESCRIPTION
	100-300N2050	BEAT CUT SW PCB ASS'Y
		BEAT CUT SW PCB
CN10	082-10340100	3P CONNECTOR BASE P=2.5MM
SW101	063-0GP18121	SLIDE SW SV60040-0102

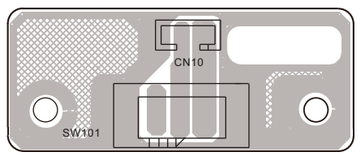
CD MAIN PCB



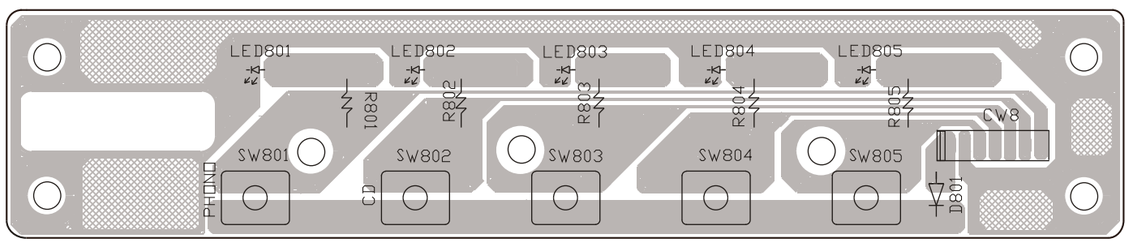
CD CONTROL PCB



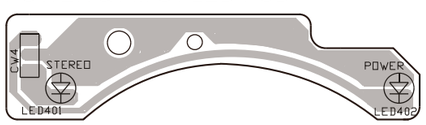
BEAT CUT PCB



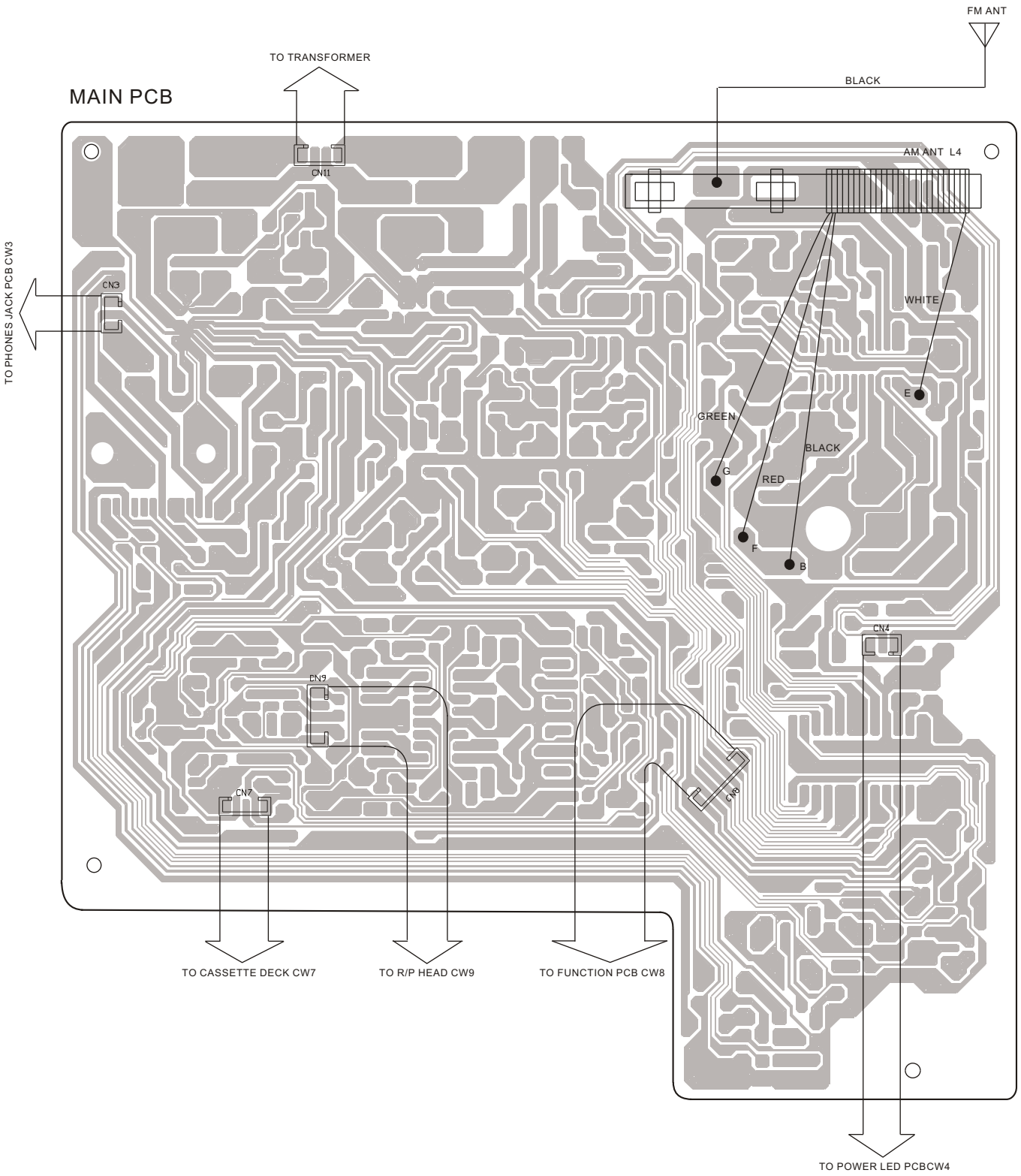
FUNCTION PCB



POWER & FM ST LED PCB



6 WIRING DIAGRAM



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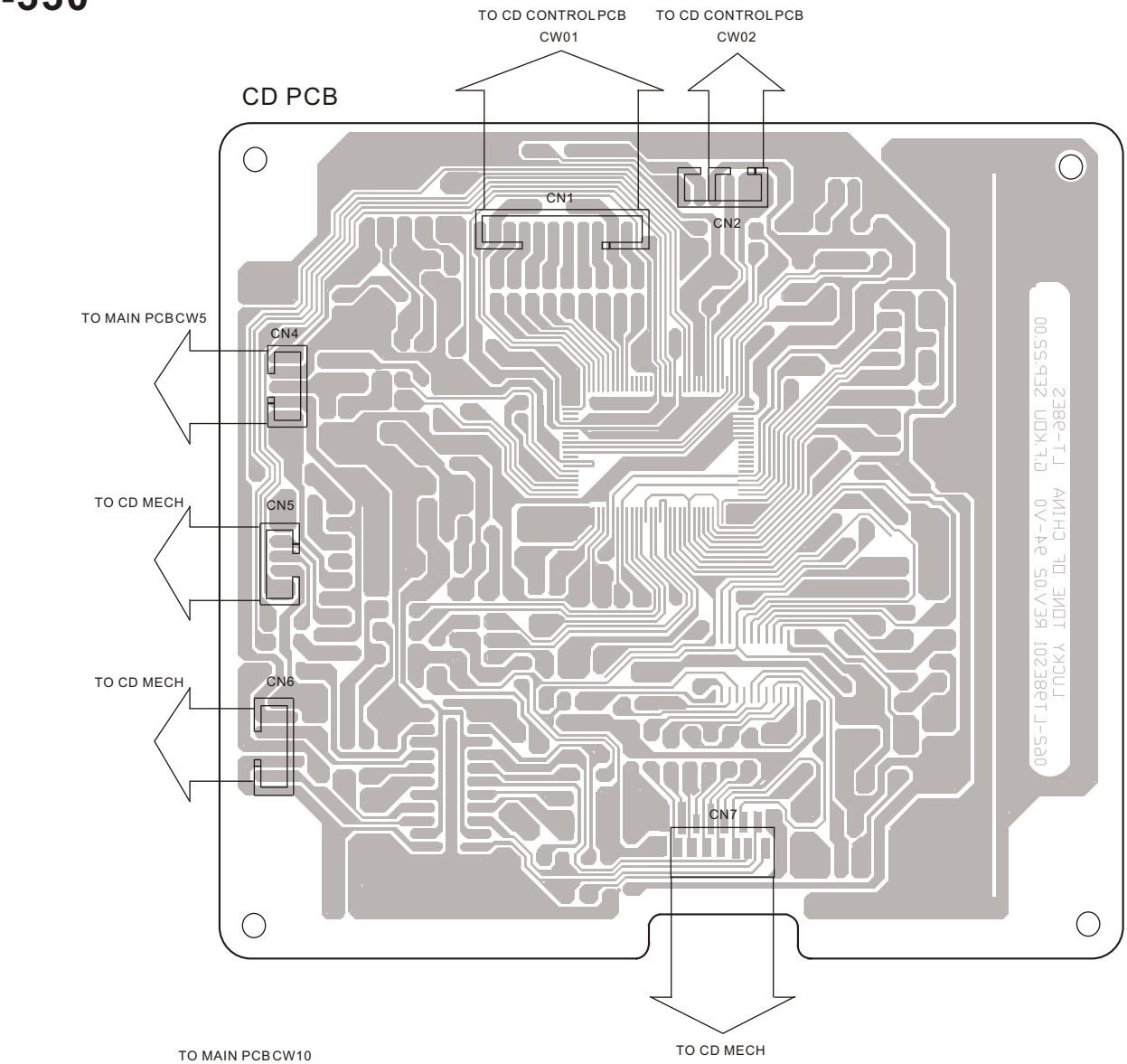
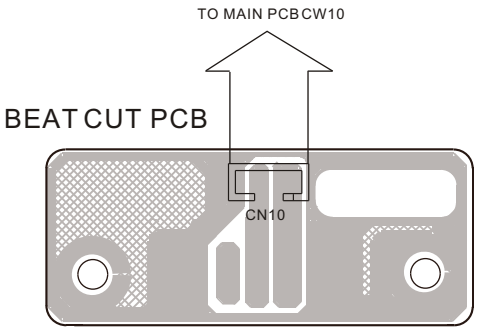
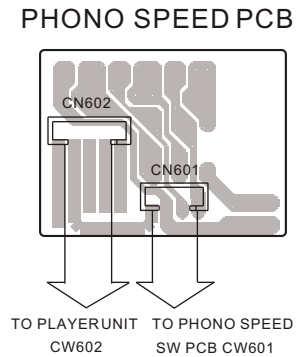
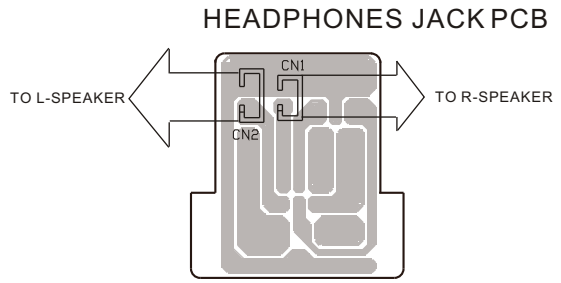

TO CD CONTROL PCB
CW01
TO CD CONTROL PCB
CW02
CD PCB
CN1
CN2
TO MAIN PCB CW5
CN4
TO CD MECH
CN5
TO CD MECH
CN6
CN7
TO CD MECH


TO MAIN PCB CW10
BEAT CUT PCB
CN10


PHONO SPEED PCB
CN602
CN601
TO PLAYER UNIT
CW602
TO PHONO SPEED
SW PCB CW601


HEADPHONES JACK PCB
TO L-SPEAKER
CN1
CN2
TO R-SPEAKER

7 INCLUDED ACCESSORIES

INCLUDED ACCESSORIES

REF. NO	PARTS NO.	DESCRIPTION	REMARKS
	046-GF330000	INSTRUCTION BOOK -ENGLISH(UL/CSA)	
	046-GF330002	INSTRUCTION BOOK - SPAISH (UNI)	
	047-D2831000	GUARRANTY SHEET	
	010-10000700	45 RPM ADAPTOR	

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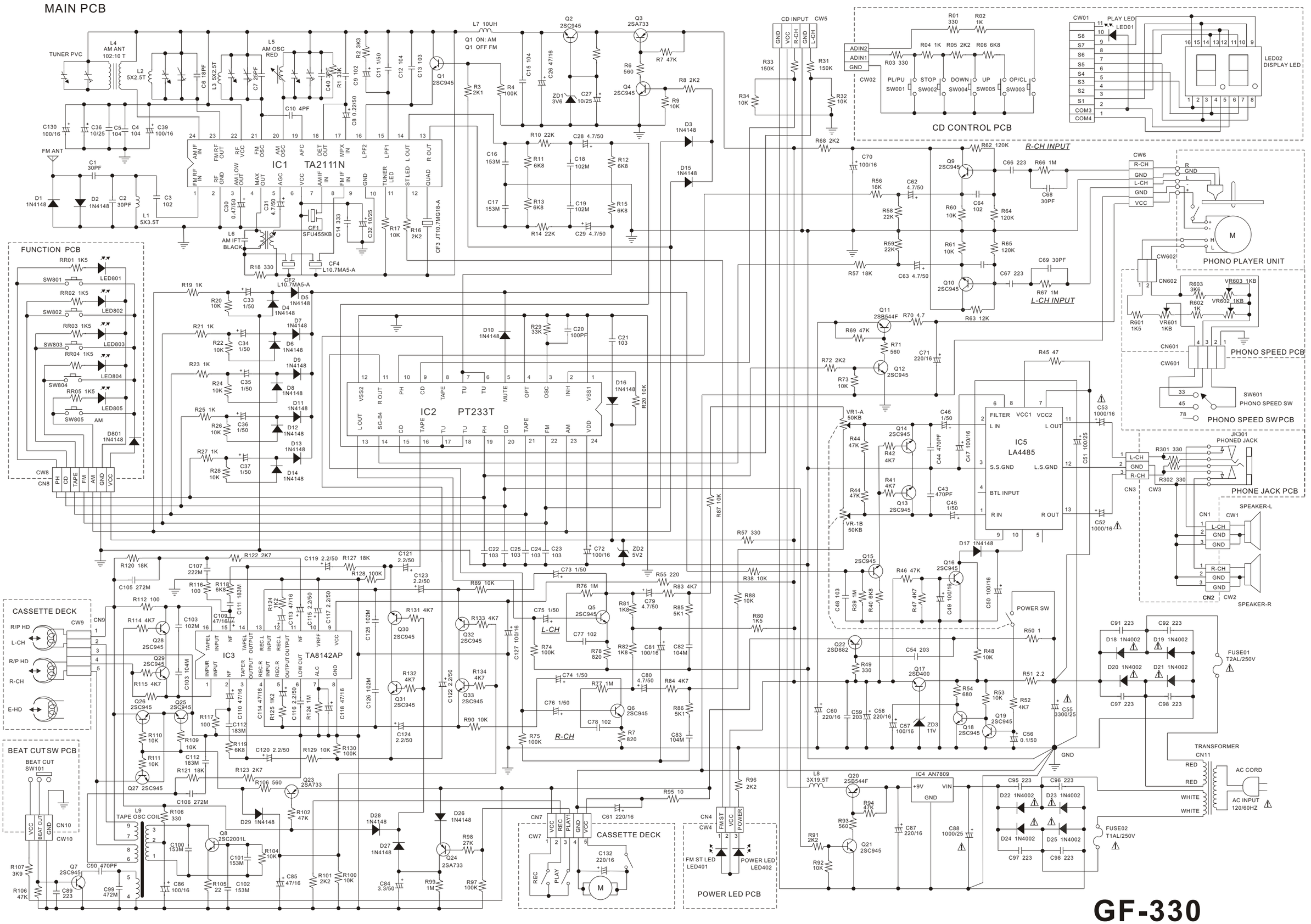
TEAC

TEAC CORPORATION	3-7-3 Nakacho, Musashino-shi, Tokyo 180-8550, Japan Phone:(0422)52-5081
TEAC AMERICA, INC.	7733 Telegraph Road, Montebello, California 90640 Phone: (323)726-0303
TEAC CANADA LTD.	5939 Wallace Street, Mississauga, Ontario L4Z 1Z8, Canada Phone: (905)-890-8008
TEAC MEXICO, S.A.De C.V.	Campesinos 184, Col. Granjas Esmeraida, 09810, Mexico Phone: (525)-581-5500
TEAC UK LIMITED	5 Marlin House, Croxley Business Park, Watford, Hertfordshire, WD188TE, U.K. Phone: 01923-819699
TEAC DEUTSCHLAND GmbH	Bahnstrasse 12, 65205 Wlesbaden-Erbenheim, Germany Phone:0611-71580
TEAC FRANCE S.A.	17, Rue Alexis-de-Tocqueville, CE 005 92182 Antony Cedex, France Phone:(1)42.37.01.02
TEAC NEDERLAND BV	Oeverkruid 15, NL-4941 W Raamsdonksveer, Nederland Phone:0162-510210
TEAC BELGIUM NV/SA.	c/o TEAC NEDERLAND BV, Oeverkruid 15, NL-4941 W Raamsdonksveer, Nederland Phone:+31-162-510860
TEAC ITALIANA S.p.A.	Via C, Cantu 11, 20092 Cinisello Balsamo, Milano, Italy Phone:02-66010550
TEAC AUSTRALIA PTY., LTD. A.B.N. 80 005 408 462	280 William Street, Melbourne, VIC 3000, Australia Phone:(03)9672-2400

PREPARED IN HONG KONG

MAIN PCB



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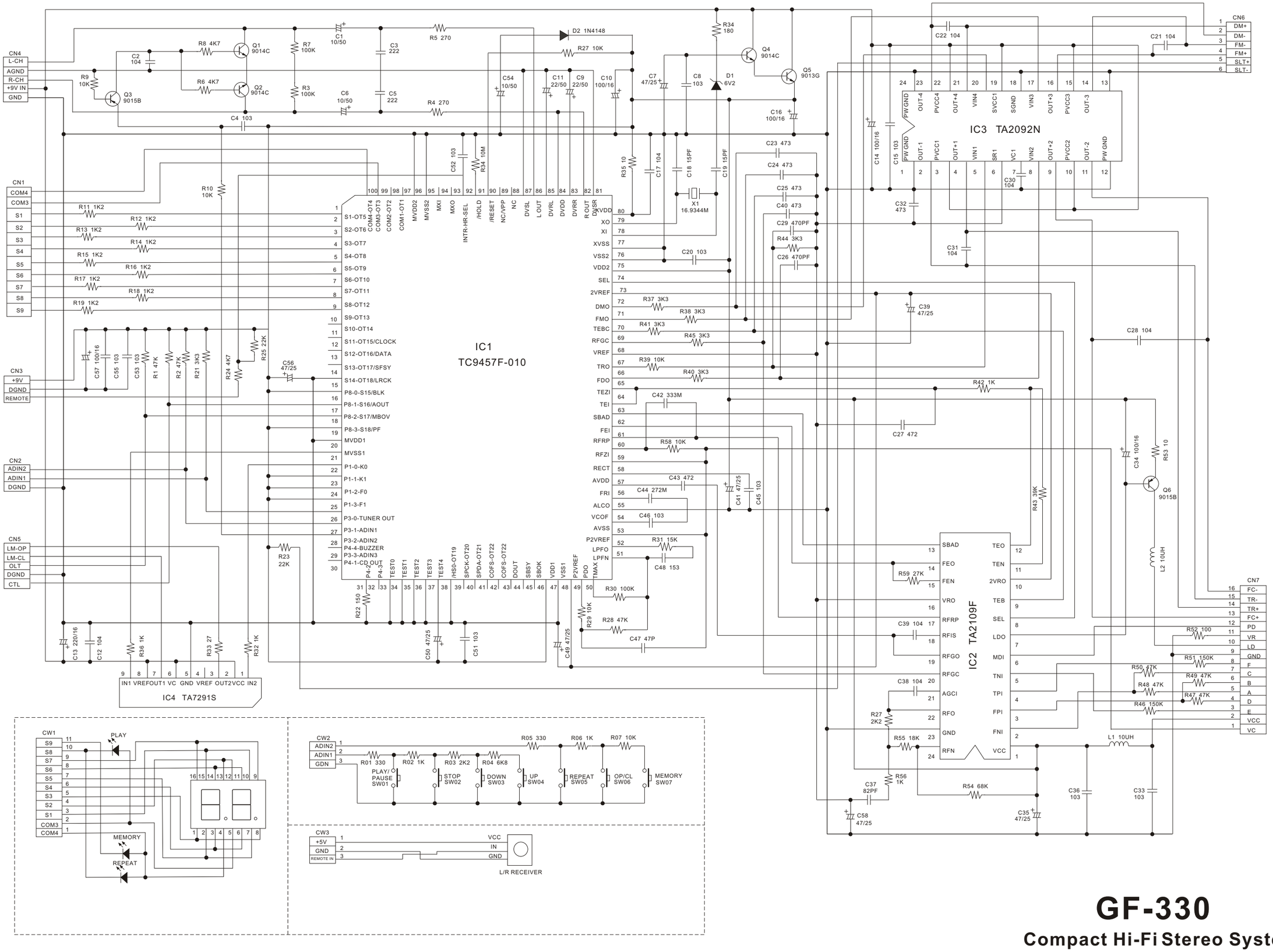
COMPACT HI-FI STEREO SYSTEM

CD MAIN PCB



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Compact Hi-Fi Stereo System